



Photoelectric sensors  
W27-2 Laser, Photoelectric proximity sensor,  
Background suppression

WT27L-2S830A



**Model Name** > **WT27L-2S830A**  
**Part No.** > **1016359**



*Illustration may differ*

**At a glance**

- 2 mm diameter light spot at a distance of 400 mm
- Precise adjustable background suppression
- Visible red laser LED
- Sensing range adjustment via potentiometer
- UL approval

**Your benefits**

- Precise detection of very small parts up to a distance of 400 mm due to 2 mm light spot
- Highly visible red laser provides quick and easy alignment
- Durable design provides high resistance to vibration



**Features**

Sensor/detection principle:	Photoelectric proximity sensor, Background suppression
Dimensions (W x H x D):	24.6 mm x 80 mm x 53.5 mm
Housing design (light emission):	Rectangular
Sensing range max.:	100 mm ... 800 mm <sup>1)</sup>
Sensing range:	100 mm ... 800 mm
Type of light:	Visible red light
Light source:	Laser <sup>2)</sup>
Laser class:	2, 2 (EN 60825-1), low power. Eyes normally protected by averting reaction and eyelid closing reflex
Wave length:	650 nm
Adjustment:	Potentiometer
Light spot size (distance):	Ø 2 mm (400 mm)

<sup>1)</sup> Object with 90 % reflectance (referred to standard white, DIN 5033) <sup>2)</sup> Average service life 50,000 h at T<sub>A</sub> = +25 °C

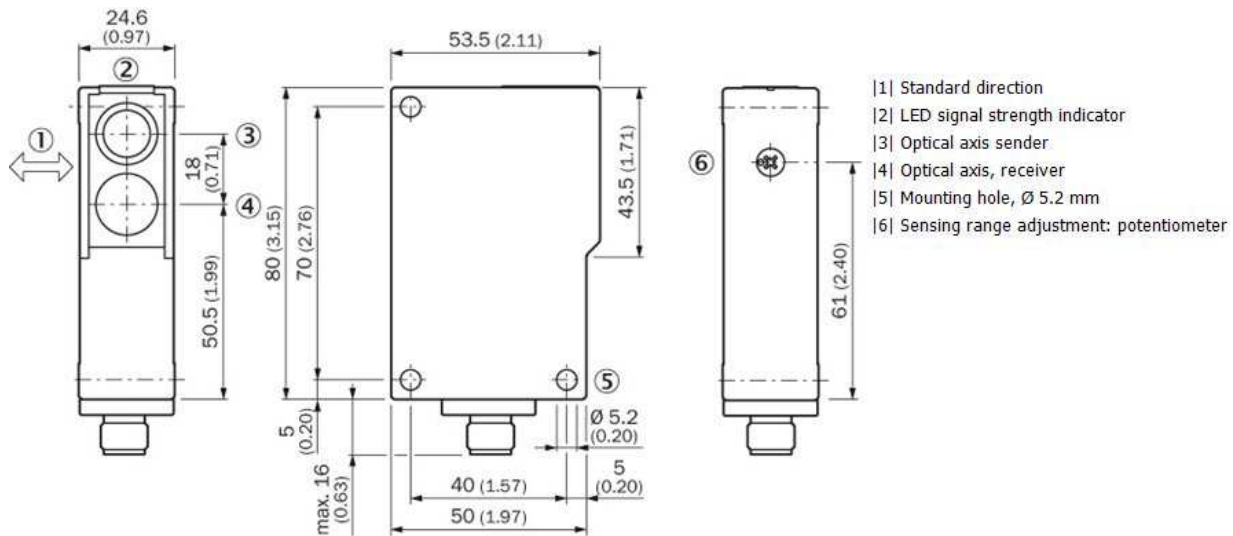
**Mechanics/electronics**

Supply voltage:	24 V AC/DC ... 240 V AC/DC <sup>1)</sup>
Power consumption:	< 2 VA
Output type:	Relay, electrically isolated <sup>2)</sup>
Output function:	Change-over contacts
Switching current (switching voltage):	4 A (24 V DC), 4 A (240 V AC)
Response time:	< 6 ms <sup>3)</sup>

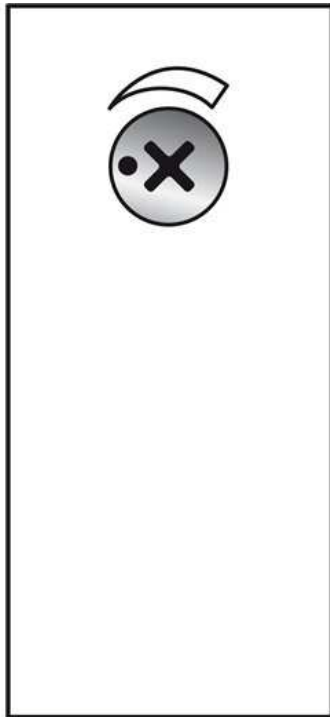
Switching frequency:	10 Hz <sup>4)</sup>
Connection type:	Mini connector 7/8", 5-pin
Circuit protection:	A, C <sup>5) 6)</sup>
Protection class:	II <sup>7)</sup>
Weight:	100 g
Special device:	✓
Enclosure rating:	IP 65
Ambient operating temperature:	-10 °C ... +45 °C
Ambient storage temperature:	-10 °C ... +75 °C
UL File No.:	NRKH.E181493 & NRKH7.E181493
Housing material:	ABS, Plastic

1) + 10 %, -20 % 2) Provide suitable spark suppression for inductive or capacitive loads 3) Signal transit time with resistive load 4) With light/dark ratio 1:1 5) A = V<sub>S</sub>  
connections reverse-polarity protected 6) C = interference suppression 7) Reference voltage: 250 V AC

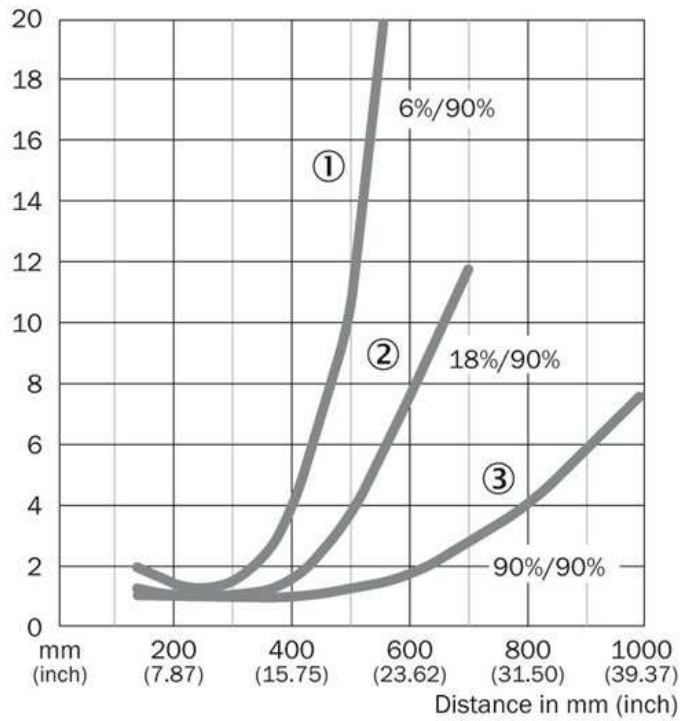
### Dimensional drawing



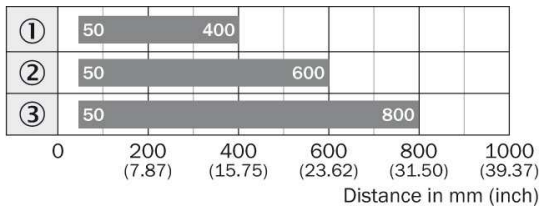
Adjustments possible



Characteristic curve



### Sensing range diagram



■ Sensing range

**Australia**

Phone +61 3 9457 0600  
1800 33 48 02 – tollfree  
E-Mail sales@sick.com.au

**Belgium/Luxembourg**

Phone +32 (0)2 466 55 66  
E-Mail info@sick.be

**Brasil**

Phone +55 11 3215-4900  
E-Mail marketing@sick.com.br

**Canada**

Phone +1 905 771 14 44  
E-Mail information@sick.com

**Česká republika**

Phone +420 2 57 91 18 50  
E-Mail sick@sick.cz

**China**

Phone +86 4000 121 000  
E-Mail info.china@sick.net.cn  
Phone +852-2153 6300  
E-Mail ghk@sick.com.hk

**Danmark**

Phone +45 45 82 64 00  
E-Mail sick@sick.dk

**Deutschland**

Phone +49 211 5301-301  
E-Mail info@sick.de

**España**

Phone +34 93 480 31 00  
E-Mail info@sick.es

**France**

Phone +33 1 64 62 35 00  
E-Mail info@sick.fr

**Great Britain**

Phone +44 (0)1727 831121  
E-Mail info@sick.co.uk

**India**

Phone +91-22-4033 8333  
E-Mail info@sick-india.com

**Israel**

Phone +972-4-6881000  
E-Mail info@sick-sensors.com

**Italia**

Phone +39 02 27 43 41  
E-Mail info@sick.it

**Japan**

Phone +81 (0)3 5309 2112  
E-Mail support@sick.jp

**Magyarország**

Phone +36 1 371 2680  
E-Mail office@sick.hu

**Nederland**

Phone +31 (0)30 229 25 44  
E-Mail info@sick.nl

**Norge**

Phone +47 67 81 50 00  
E-Mail sick@sick.no

**Österreich**

Phone +43 (0)22 36 62 28 8-0  
E-Mail office@sick.at

**Polska**

Phone +48 22 837 40 50  
E-Mail info@sick.pl

**România**

Phone +40 356 171 120  
E-Mail office@sick.ro

**Russia**

Phone +7-495-775-05-30  
E-Mail info@sick.ru

**Schweiz**

Phone +41 41 619 29 39  
E-Mail contact@sick.ch

**Singapore**

Phone +65 6744 3732  
E-Mail sales.gsg@sick.com

**Slovenija**

Phone +386 (0)1-47 69 990  
E-Mail office@sick.si

**South Africa**

Phone +27 11 472 3733  
E-Mail info@sickautomation.co.za

**South Korea**

Phone +82 2 786 6321/4  
E-Mail info@sickkorea.net

**Suomi**

Phone +358-9-25 15 800  
E-Mail sick@sick.fi

**Sverige**

Phone +46 10 110 10 00  
E-Mail info@sick.se

**Taiwan**

Phone +886 2 2375-6288  
E-Mail sales@sick.com.tw

**Türkiye**

Phone +90 (216) 528 50 00  
E-Mail info@sick.com.tr

**United Arab Emirates**

Phone +971 (0) 4 88 65 878  
E-Mail info@sick.ae

**USA/México**

Phone +1(952) 941-6780  
1 (800) 325-7425 – tollfree  
E-Mail info@sickusa.com

More representatives and agencies  
at [www.sick.com](http://www.sick.com)